DEPARTMENT OF HEALTH AND HUMAN SERVICES
Public Health Service
Centers for Disease Control and Prevention
National Institute for Occupational Safety and Health
1090 Tusculum Avenue
Cincinnati OH 45226-1998

March 6, 2025
HHE 2024-0046

First Name Last Name
Email address

Dear Mr. Last Name:

Thank you for being part of the National Institute for Occupational Safety and Health (NIOSH) Health Hazard Evaluation at Verizon New England in Massachusetts. The union requestor was concerned about lead exposure during work on lead-sheathed telecommunication cables in underground environments. This letter gives the results of the air and handwipe tests you had during our visit in January 2025.

What did we do?

- We measured your exposures to lead in the air during at least part of one shift.
- We took hand wipes for lead after you completed work in the manhole, before you entered your work vehicle to return home or to the garage, or at the garage after you completed routine hand hygiene activities before entering your personal vehicle.

What did we compare your results to?

We compared your air sample results to the occupational exposure limit for lead of 50 micrograms per cubic meter of air ($\mu g/m^3$) as an 8-hour time weighted average (TWA) set by the Occupational Safety and Health Administration (OSHA), NIOSH, and the American Conference of Governmental Industrial Hygienists (ACGIH®). An occupational exposure limit is meant to be the amount of a substance or agent that most employees can be exposed to without harm. Employers are required to keep exposure below OSHA limits. Additionally, OSHA has an action level of 30 $\mu g/m^3$ as an 8-hour TWA. If occupational exposures are at or above the action level, employers should refer to the OSHA regulations for specific actions such as conducting additional air monitoring, providing medical monitoring such as blood lead level testing, and providing training and education that are intended to reduce lead exposures.

NIOSH, OSHA, and ACGIH do not have limits for lead on hands. However, chemicals on a person's skin can add to their exposure. Also, if this substance is on your hands when you leave work, you can transfer it to surfaces in your car or home and other people.

What did we find?

The result of your personal air sampling for lead was ## µg/m^3 as an 8-hour TWA. Your 8-hour TWA exposure to lead in air was below the lowest occupational exposure limit. However, your 8-hour TWA exposure to lead in air was above the OSHA action level.

We found ## micrograms (µg) of lead on the palm side of both of your hands after you [completed routine hand hygiene]. Lead on your hands may add to your exposure to lead and result in the transfer of lead onto other surfaces, including in your personal vehicle or home.

What happens next?

The next time you see your medical provider, consider telling them about your work and your potential work exposures to lead. You may want to give your medical provider a copy of this letter for your medical records.

We sent a letter to your employer, employee, and union representatives summarizing our results so far and providing recommendations. It does not mention your name. Please contact your employer, employee, or union representative, or me for a copy of this letter if you want to see it. When we complete our evaluation, we will send a summary report to your employer, employee, and union representatives. Your employer must post the report in your workplace for at least 30 days.

Thank you again for being part of our evaluation. If you or your medical provider has questions, please contact me by email at jessica.li@cdc.gov or by phone at (513) 841-4439.

Sincerely,

Jessica F. Li, MSPH, CIH
Industrial Hygienist
Hazard Evaluations and Technical
Assistance Branch
Division of Field Studies and Engineering